

Serial No. 09/695,898

7

REMARKS

This communication is intended as a full and complete response to the final Office Action mailed June 8, 2005. In the Office Action, the Examiner notes that Claims 1-5, 7-15 and 17-21 are pending and rejected. By this response, Applicants have amended claims 1, 14 and 21. The amendments to the claims are fully supported by the Specification. For example, the amendments to the claims are supported at least by page 2, lines 18-28; page 9, lines 23-30; and page 10, lines 16-26. Thus, no new matter has been added and the Examiner is respectfully requested to enter the amendments to the claims.

In view of both the amendments presented above and the following discussion, Applicants submit that none of the claims now pending in the application are anticipated or obvious under the respective provisions of 35 U.S.C. §102 and §103. Thus, Applicants believe that all of these claims are now in allowable form.

It is to be understood that Applicants, by amending the claims, do not acquiesce to the Examiner's characterizations of the art of record or to Applicants' subject matter recited in the pending claims. Further, Applicants are not acquiescing to the Examiner's statements as to the applicability of the art of record to the pending claims by filing the instant responsive amendments.

35 U.S.C. §102(e) Rejection of Claims 1-5, 7, 8, 10, 12-15 and 17-21

The Examiner has rejected Claims 1-5, 7, 8, 10, 12-15 and 17-21 under 35 U.S.C. §102(e) as being anticipated by Yang et al (U.S. Patent No. 6,005,620, hereinafter "Yang"). The rejection is respectfully traversed.

Applicants independent claim 1 recites (emphasis added below):

- "1. A method comprising:
receiving a first compressed video stream;
determining a first encoding profile for the first compressed video stream;
encoding a second video stream in accordance with a particular encoding scheme to generate a second compressed video stream having a second encoding profile which matches the first encoding profile to within a requisite degree;

382782_1.DOC

Serial No. 09/695,898

8

splicing the second compressed video stream into the first compressed video stream to produce a spliced stream, wherein the requisite degree of matching between the second encoding profile and the first encoding profile is selected such that the spliced video stream can be decoded without producing visible artifacts on a display during or after a transition from a first compressed video stream portion of the spliced stream to a second compressed video stream portion of the spliced stream.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987) (emphasis added). The Yang reference fails to disclose each and every element of the claimed invention, as arranged in claim 1 as amended.

Specifically, the Yang reference fails to teach or suggest at least the "second encoding profile which matches the first encoding profile to within a requisite degree," and "wherein the requisite degree of matching between the second encoding profile and the first encoding profile is selected such that the spliced video stream can be decoded without producing visible artifacts on a display during or after a transition from a first compressed video stream portion of the spliced stream to a second compressed video stream portion of the spliced stream" as recited in the claim.

Yang discloses a method which is directed to multiplexing video streams in a manner that manages bandwidth. Specifically, Yang discloses a method by which a non-compressed live video signal is compressed at a compression rate that is indirectly related to, among other factors, a complexity determination of a pre-compressed video signal. The Examiner alleges on pages 4-5 of the Office Action mailed on February 28, 2005 (emphasis added below):

"Figure 4 of Yang et al discloses that encoding 52 of a second video stream 32 is in accordance to the profile 40 of the first compressed video stream to produce a spliced stream 34. That is, the video streams are approximately matched in terms of bit rates, compression factors, etc."

However, the Applicants respectfully disagree with this allegation. The Yang reference does not approximately match the bit rates, compression factors, etc. of the pre-

Serial No. 09/695,898

9

compressed video streams and live video streams. There is no teaching within the Yang reference of matching bit rates, compression factors, etc.

Instead, Yang discloses that a bandwidth is allocated to a particular live video signal according to the equation $BW_i = C_i / C_{SUM} * BW_{LIVE}$. Yang further discloses (emphasis added below):

"the bandwidth BW_i for the current video signal determined in step 106 is converted to a corresponding compression factor, in the form of a quantizing factor, which is then transmitted to the corresponding RTE 52 to specify the rate of compression of the video signal by that RTE 52." (column 4, lines 59-64).

Thus, the Yang reference clearly discloses that the compression factor applied to a particular live video signal is converted from BW_i , which is only indirectly related to the complexity of the pre-compressed video stream via the above equation. The indirect relationship is that BW_i is related to BW_{LIVE} by the above equation, and BW_{LIVE} is dependent upon the pre-compressed video bandwidth, as disclosed by the Yang reference (emphasis added below):

" BW_{LIVE} is determined by subtracting the pre-compressed video bandwidth determined at step 100 from the total video bandwidth available for the broadcast system 10" (column 4, lines 39-42);

and the pre-compressed video bandwidth is related to the complexity of the pre-compressed video stream, as disclosed (emphasis added below) :

"at step 100, the bandwidth (e.g. in data bits/second) of the pre-compressed video signals for the current video frame is determined by adding together all of the complexity signals generated by the complexity detectors 40" (column 4, lines 33-37).

Thus, to summarize, the compression factor applied to a particular live video signal is related to the bandwidth allocated to the live video signal, BW_i , which is related to the bandwidth allocated to all of the live video signals, BW_{LIVE} , which is related to the bandwidth of the pre-compressed video signals, which is related to the complexity of the pre-compressed video signals. However, this long chain of the indirect relationship between the compression factor applied to the particular live video signal and the complexity of the pre-compressed video signals does not teach that the bit rates,

Serial No. 09/695,898

10

compression factors, etc. of the pre-compressed video streams and live video streams are matched, as alleged by the Examiner.

Furthermore, the Applicants respectfully submit that arguments similar to those presented above were also submitted in the response filed on May 31, 2005, and the Examiner has not responded to, or refuted, the Applicants argument that the Yang reference does not teach matching the complexity or compression factors of the live video signals and pre-compressed video signals. This is an important aspect of the Applicants arguments, and the Applicant is respectfully confused as to why the Examiner has not addressed this aspect of the Applicants arguments regarding the differences between the present invention and the Yang reference. The Applicant respectfully requests that the Examiner please cite a passage of the Yang reference that has a teaching of matching of complexity or compression factors of the live video signals and pre-compressed video signals.

In the present Office Action, the Examiner has instead responded (emphasis added below):

"Applicant's arguments filed 5/31/05 have been fully considered but they are not persuasive. Applicant asserts on pages 7 and 8 of the Remarks that Yang et al fails to disclose any profile. However, it is submitted that a profile is merely some sort of analysis. As applicant agrees, the mathematical formula of Yang et al analyzes the compression scheme in order to choose a profile. Thus, the analysis process of Yang et al meets the definition of a profile in its broadest reasonable sense." (page 3 of the Office Action mailed on June 8, 2005)

However, the Applicants respectfully submit that this response by the Examiner does not address the Applicants argument filed on May 31, 2005 that the Yang reference does not teach or suggest matching of encoding profiles.

Furthermore, the Applicants have additionally amended the claim to clarify the claim language to recite "wherein the requisite degree of matching between the second encoding profile and the first encoding profile is selected such that the spliced video stream can be decoded without producing visible artifacts on a display during or after a transition from a first compressed video stream portion of the spliced stream to a second compressed video stream portion of the spliced stream". The Applicants

382782_1.DOC

Serial No. 09/695,898

11

respectfully submit that the Yang reference does not teach or suggest matching the second and first encoding profiles to a requisite degree such that visible artifacts are not produced on a display during and after transition from the first to the second portion of the spliced stream. The Yang reference has no teaching concerning visible artifacts produced on a display.

Therefore, Yang fails to disclose each and every element of the claimed invention, as arranged in Applicants' independent Claim 1. Thus, Claim 1 is not anticipated by Yang and is patentable under 35 U.S.C. §102. Furthermore, since Claims 14 and 21 include relevant limitations similar to those discussed above in regards to Claim 1, Claims 14 and 21 are also not anticipated by Yang and are patentable under 35 U.S.C. §102. Moreover, Claims 2-5, 7, 8, 10, 12-13, 15, and 17-20 depend, either directly or indirectly, from independent Claims 1 and 14, and recite additional limitations thereof. As such and at least for the same reasons as discussed above, these dependent claims are also not anticipated by Yang and are patentable under 35 U.S.C. §102.

35 U.S.C. §103(a) Rejection of Claims 9 and 11

The Examiner has rejected Claims 9 and 11 as being obvious and unpatentable over Yang under the provisions of 35 U.S.C. §103(a). Applicants respectfully traverse the rejection.

Claims 9 and 11 depend from allowable base Claim 1 (either directly or indirectly). Consequently, Claims 9 and 11 are themselves allowable. As such, Applicants submit that Claims 9 and 11 are not obvious and fully satisfy the requirements of 35 U.S.C. §103 and are patentable thereunder. Therefore, Applicants respectfully request that the rejections of claims 9 and 11 under 35 U.S.C. §103(a) be withdrawn.

382782_1.DOC

Serial No. 09/695,898

12

CONCLUSION

Thus, Applicants submit that all the claims presently in the application are in condition for allowance. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

If, however, the Examiner believes that there are any unresolved issues requiring adverse final action in any of the claims now pending in the application, it is requested that the Examiner telephone Eamon J. Wall, Esq. or Stephen Guzzi at (732) 530-9404 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,

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